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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/702,189

11/05/2003

William G. Dennis

63351.000012

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07/02/2007

FOLEY HOAG, LLP

PATENT GROUP, WORLD TRADE CENTER WEST

155 SEAPORT BLVD

BOSTON, MA 02110

EXAMINER

NGUYEN, TUAN VAN

ART UNIT

PAPER NUMBER

3731

MAIL DATE

DELIVERY MODE

07/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/702,189

Applicant(s)

DENNIS, WILLIAM G.

Examiner

Tuan V. Nguyen

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) 16-59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 60 and 61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/04/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. According to the Response to the Election/Restrictions Requirement applicant filed on June 4, 2007, applicant elected without traverse Group I of claims 1-15 and 60-61. Claims 16-59 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objection

2. Claims 7 and 14 are objected to of the following informalities: claims 7 and 14 recite limitation "maximum occluding force of at least 0.20 pounds" is unclear because the limitation "maximum" and "at least" are contradict with each other. Examiner interprets the limitation as "maximum occluding force of about 0.20 pounds"

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1, 2, 4, 10, 15 and 60-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Kees, Jr. (U.S. 4,658,822).**

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5. Referring to claims **1, 2, 4, 10, 15 and 60-61**, Kees discloses (see Figs. 1, 2, 3 and 4) an occlusion clip comprising: made from a single wire includes an upper single element 14 having a jaw 23 or a guide portion attached to the distal end of the upper single element; a lower single element 16 and a jaw 21 or a guide portion attached to the distal end of the lower single element; jaw 23 includes a contacted with jaw 21; a occlusion member plane defined by upper and lower single elements; and a spring portion 26 connecting the proximal upper member end to the proximal lower member, the spring portion having a spring height dimension in the occlusion member plane. Figure 4 discloses the spring portion 26 defines a width dimension perpendicular to the occlusion member plane that is no greater than the wire diameter and the maximum occlusion height dimension of the upper single element 14 plus the lower single element 16 is no greater than twice the wire diameter.
6. **Claims 1, 3, 10, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Frantzen et al. (U.S. 3,193,732).**
7. Referring to claims 1, 3, 10, and 13, Frantzen discloses (see Figs. 6A-6C) an occlusion clip comprising: made from a single wire includes an upper single element 305; a lower single element 310; a occlusion member plane defined by upper and lower single elements; and a spring portion 315 connecting the proximal upper member end to the proximal lower member, the spring portion having a interior spring height dimension in the occlusion member plane being less than

twice the wire diameter and a maximum occlusion width dimension perpendicular to the occlusion member plane that is no greater than the wire diameter and the spring height dimension increases as a rotational separation between the single element upper occlusion member and the single element lower occlusion member increases. Figure 6B discloses the spring portion 315 defines a width dimension perpendicular to the occlusion member plane that is no greater than the wire diameter.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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10. **Claims 5, 6, 8, 9, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kees in view of Schmidt et al (U.S. 5,053,045).**
11. Referring to **claims 5, 6, 8, 9 and 11-12**, Kees discloses the invention substantially as claimed except for the wire is formed from titanium and has a diameter in a range from about 10 mils to about 50 mils. However, Schmidt discloses a surgical clip that formed a single wire wherein the wire is formed from titanium and has a diameter of 37 mils or 40 mils (see col. 4, lines 65 to col. 5, line 29). Therefore, it would have been obvious to one of ordinary skill in the art to use the titanium wire, as disclosed by Schmidt, to incorporate into the device, as disclosed by Kees because this will further utilize the device of Kees as a surgical clip for isolate a cerebral aneurysm wherein the titanium will not interfere with the magnetic resonance imaging diagnosis as suggested by Schmidt (see col. 1, lines 10-15 and col. 2, lines 25-30).
12. **Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kees in view of Schmidt et al (US 5,634,932) .**
13. Referring to **claims 7 and 14**, Kees discloses the invention substantially as claimed except for specifically discloses the spring biases the upper and lower single occlusion members to exert a maximum occluding force of about 0.20 pounds. However, Schmidt discloses a surgical clip made of a single wire wherein the clip has a spring force applied to the upper and lower single occlusion members to of about 200 grams or 0.20 pounds. Therefor, it would have been obvious to one of ordinary skill in the art to further utilize the device of Kees by design the surgical

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clip as disclosed by Kees to have a spring force of about 0.20 pounds of compressive force to maintain a positive occlusion in a aneurysm in a blood vessel.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan V. Nguyen whose telephone number is 571-272-5962. The examiner can normally be reached on M-F: 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AnhTuan Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan V. Nguyen
June 25, 2007


ANH TUAN T. NGUYEN
SUPERVISORY PATENT EXAMINER
6/25/07.